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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,389	07/09/2001	Dean Furbush	09857-060001	9350

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EXAMINER

SUBRAMANIAN, NARAYANSWAMY

ART UNIT	PAPER NUMBER
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3692

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/903,389	Applicant(s) FURBUSH ET AL.	
	Examiner Narayanswamy Subramanian	Art Unit 3692	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to applicant's communication of July 9, 2001.

Original claims 1-32 are pending and have been examined. The rejections are stated below.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-17 and 25-32 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory Subject matter.

35 USC 101 requires that in order to be patentable the invention must be a "new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" (emphasis added).

Claims 1-17 and 25-32 are drawn to "an electronic market and a computer program product residing on "a computer readable media for use in an electronic market for trading of securities comprising instructions for causing a system to: store an incoming order that is preferenced to a particular quoting market participant, along with other orders in a queue; and determine when the order is next-in line to be removed from queue for trading of securities". As such the claimed invention is directed to a judicial exception to 35 U.S.C. 101 (i.e., an abstract idea, natural phenomenon, or law of nature) and is not directed to a practical application of such judicial exception because the claims do not require any physical transformation and the invention as claimed does not produce a useful, concrete, and tangible result.

The Court of Appeals for the Federal Circuit issued opinions in *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 149 F. 3d 1368, 47 USPQ2d 1596 (Fed. Cir. 1998) and

AT&T Corp. v. Excel Communications, Inc., 172 F.3d 1352, 50 USPQ2d 1447 (Fed. Cir. 1999).

These decisions explained that, to be eligible for patent protection, the claimed invention as a whole must accomplish a practical application. That is, it must produce a “useful, concrete and tangible result.” State Street, 149 F.3d at 1373-74, 47 USPQ2d at 1601 02. To satisfy section 101 requirements, the claim must be for a practical application of the § 101 judicial exception, which can be identified in various ways: (a) The claimed invention “transforms” an article or physical object to a different state or thing. (b) The claimed invention otherwise produces a useful, concrete and tangible result, based on the factors discussed below.

The USPTO’s official interpretation of the utility requirement provides that the utility of an invention has to be (i) specific, (ii) substantial and (iii) credible. See MPEP § 2107. The claimed invention does not meet this requirement.

The tangible requirement does require that the claim must recite more than a § 101 judicial exception, in that the process claim must set forth a practical application of that § 101 judicial exception to produce a real-world result. Benson, 409 U.S. at 71-72, 175 USPQ at 676-77 (invention ineligible because had “no substantial practical application”). It is not clear as to what real world result is produced by determining when the order is next-in line to be removed from queue for trading of securities.

For an invention to produce a “concrete” result, the process must have a result that can be substantially repeatable or the process must substantially produce the same result again. In re Swartz, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000) (where asserted result produced by the claimed invention is “irreproducible” claim should be rejected under section 101). The opposite of “concrete” is unrepeatable or unpredictable. The limitations of the claimed

invention are not sufficiently precise to guarantee that result that is substantially repeatable or the process produces the same result again.

There is no useful, concrete and tangible result produced from implementing the steps of the claimed invention. The dependent claims are rejected for the same reason and by way of dependency on a rejected independent claim.

Applicant's claims 1-17 are intended to embrace or overlap two different statutory classes of invention as set forth in 35 § U.S.C. §101. The claim 1 begins by discussing an electronic market, which is interpreted as a system (ex. Preamble of claim 1), the body of the claim discusses the specifics of the system (a client station and a server system) and process (a process to determine when the order is next in line to be removed from queue). (See rejection of claims under 35 U.S.C. §112, second paragraph, for specific details regarding this issue). "A claim of this type is precluded by express language of 35 U.S.C. §101 which is drafted so as to set forth statutory the statutory classes of invention in the alternative only", *Ex parte Lyell* (17USPQ2d 1548).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is not sufficiently precise due to the combining of two different statutory classes of invention in a single claim. The preamble the claim refers to a system (interpreted as an

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apparatus, a client station and a server system), but the body of the claim discusses the specifics of a process (a process to determine when the order is next in line to be removed from queue). A claim is considered indefinite if it does not apprise those skilled in the art of its scope. *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F. 2d 1200, 1217 (Fed. Cir. 1991). Claims 2-17 are rejected as being dependent on claim 1.

Claim 1 also recites “a queue storing the order along with other orders”. It is not clear if the term “queue” refers to a process or an apparatus. Clarification/correction is required. Claims 2-17 are rejected as being dependent on claim 1.

Claims 1, 18 and 25 recite the limitation “an order that is preferenced to a particular quoting market participant”. It is not clear what the applicants mean by this limitation. These claims also include the limitation “determine when the order is next in line to be removed from queue”. It is not clear which order the applicant is referring to. Is it the order that was entered or does it refer to other orders in the queue? Appropriate clarification/correction is required. The dependent claims are rejected for the same reason and by way of dependency on a rejected independent claim.

Claims 2, 19 and 27 recite the limitation “executes or delivery the order for an amount up to or equal to both the displayed quote/order and reserve size of a quoting market participant”. It is not clear what the applicants mean by this limitation. Appropriate clarification/correction is required.

Claim 3 recites the limitation “the entering market participant”. It is not clear what the applicants mean by this limitation and also this limitation lacks antecedent basis. Appropriate clarification/correction is required.

Claims 4, 20 and 28 recite the limitation “others of the orders in the queue are non-directed orders”. It is not clear what the applicants mean by this limitation. Appropriate clarification/correction is required.

Claim 5 recites the limitation “the market of claim 2 wherein the non-directed orders are executed in the server system”. It is not clear what the applicants mean by this limitation and also this limitation lacks antecedent basis. Non-directed orders are not defined in claim 2. Appropriate clarification/correction is required.

Claims 6, 22 and 29 recite the limitation “wherein the order preferenced to a particular participant is an order that can be of two types, having Price Restrictions that are executed or delivered for execution only if the quoting market participant is at the BBO up to the displayed and reserve size or not having such price restrictions”. It is not clear what the applicants mean by this limitation and terms like “BBO”. Appropriate clarification/correction is required.

Claim 8 recites the limitation “wherein one of the types is Preferred Orders with Price Restrictions that are executed or delivered for execution against the preferenced quoting market participant to which the order is being directed only if the quoting market participant is at the BBO up to the displayed and reserve size”. It is not clear what the applicants mean by this limitation. Appropriate clarification/correction is required.

Claim 11 recites the limitation “system of claim 1 wherein the client system”. It is not clear what the applicants mean by this limitation and also this limitation lacks antecedent basis. Client system is not defined in claim 1. Appropriate clarification/correction is required.

Claims 12 and 31 recite the limitation “the server executes Directed Orders by delivery of the order to a single market participant that is designated by an identifier by the sender of the

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order with the directed Orders being delivered for response rather than an automatic execution against the receiving market participant's quote". It is not clear what the applicants mean by this limitation and also this limitation lacks antecedent basis. Directed Orders are not defined in claims 5 and 25 respectively. Appropriate clarification/correction is required.

Claim 21 recites the limitation "the market of claim 20". This limitation lacks antecedent basis because claim 20 is a method claim. Appropriate clarification/correction is required.

In view of these ambiguities the examiner is unable to provide art rejections for these claims.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are listed on the attached form PTO-892.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Narayanswamy Subramanian whose telephone number is (571) 272-6751. The examiner can normally be reached Monday-Thursday from 8:30 AM to 7:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached at (571) 272-6783. The fax number for Formal or Official faxes and Draft to the Patent Office is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PMR or Public PAIR. Status information for unpublished applications is available through Private PMR only. For more information about the PMR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "N. Sub", followed by a horizontal line.

Dr. N. Subramanian

Primary Examiner

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June 24, 2007